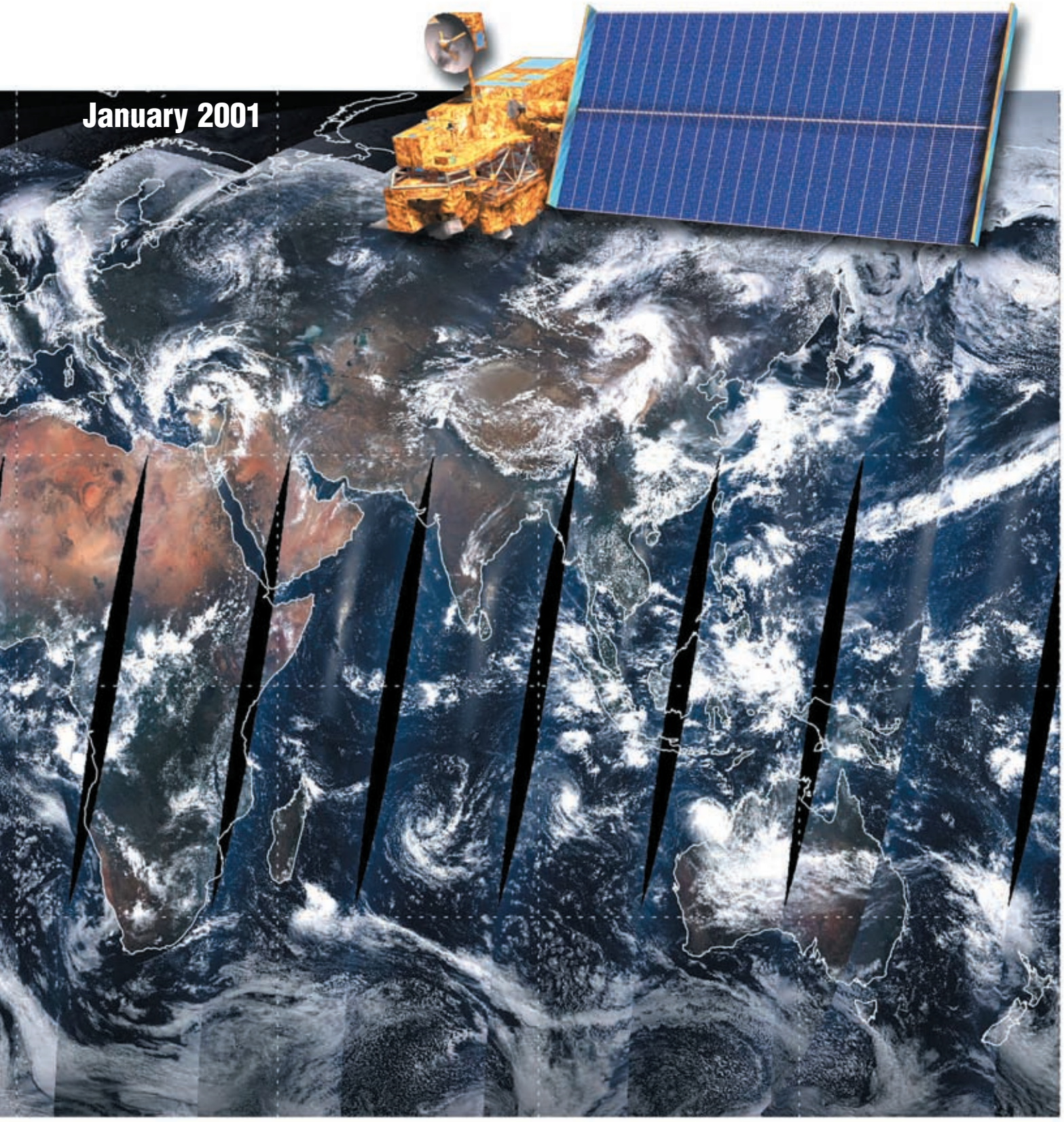
Laboratory for Atmospheres

PHILOSOPHY, ORGANIZATION, MAJOR ACTIVITIES, AND 2000 HIGHLIGHTS



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NASA GODDARD SPACE FLIGHT CENTER

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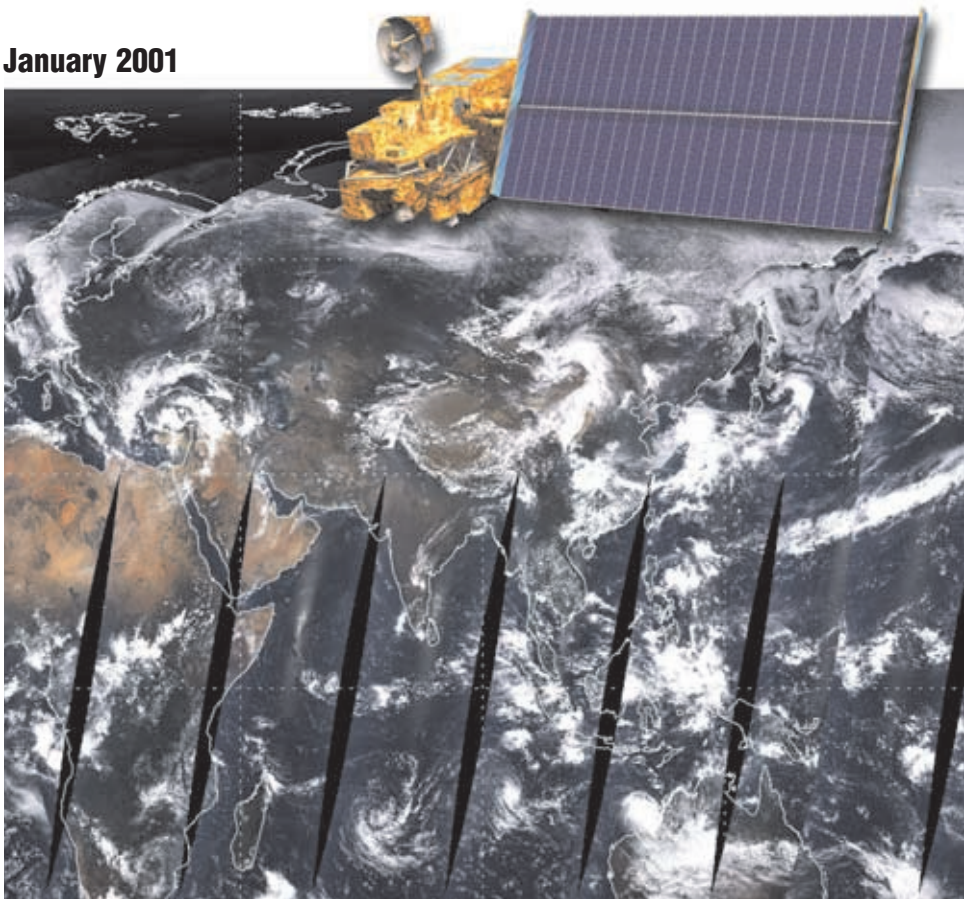

Terra, the flagship spacecraft of NASA's Earth Observing System (EOS). Terra was launched in December 1999 and had a successful first year of operations during 2000. Terra is an international project, involving NASA centers, NOAA, NRL, universities, and industry. Two of the instruments were built abroad: ASTER (Advanced Spaceborne Thermal Emission and Reflection Radiometer), in Japan, and MOPITT (Measurements of Pollution in the Troposphere), in Canada. Terra has five state-of-the-art sensors for studying interactions among the Earth's atmosphere, lands, and oceans. The EOS senior project scientist is Michael King, Code 900. The Terra project scientist was Yoram Kaufman of Code 913 until September 2000, when the position was taken over by Jon Ranson of Code 923. The deputy Terra project scientist is Si-Chee Tsay of Code 913. (For further information on Terra, see the Terra Web site at http://terra.nasa.gov/.)

Earth, a composite image of the first full day of data taken April 19, 2000, from the Moderate Resolution Imaging Spectroradiometer (MODIS) on Terra. Vincent Salomonson, Code 900, is the MODIS science team leader. The science team is composed of four groups: atmosphere, calibration, land, and ocean. Robert Murphy, Code 900, is the MODIS project scientist. Michael King of Code 900 is the group leader of the atmosphere group, and Yoram Kaufman (Code 913) is one of the members. Scientists in our Laboratory use data from MODIS and the other Terra instruments to study regional and global-scale changes in clouds, aerosols, fires, and other features of the Earth's system that affect our atmosphere. A few of these studies are discussed in the Highlights section of this report. (For further information on MODIS, see the Web site at http://modis.gsfc.nasa.gov/.)